

REMARKS

The amendment to claim 2 is supported in canceled claim 1 and in the specification at page 4, line 24 to page 5, line 2. In that passage, the verb "lift" is found; the noun "lifter," added to claim 2, is supported at page 7, line 5. The final paragraph is supported at page 4, line 15 and throughout the specification.

The term "dorsiflexion" is removed from the claims (except claim 8) because, at the interview of May 15, 2002, Examiners Klebe and Johnson asserted that the Applicant's proposed amendment to the specification to accord with a proposed amendment to claim 1 would introduce new matter; the examiners said that even though the proposed amendment to the specification only removed text and did not add text, it would introduce new matter by changing the definition of "dorsiflexion." The Applicant respectfully disagrees with this assertion, but to advance the prosecution removes the term "dorsiflexion" from the claims (except allowable claim 8).

New claims 13-16 are supported in the drawing and are patentable for the reasons set out below.

In response to the official action:

[1-2] The Applicant affirms the election of species 1. The Applicant believes he did not actually traverse the election requirement on March 18, 2002, as the Action states, and hereby withdraws any such traversal (if the PTO maintains asserting there was traversal).

[3] The declaration was objected to for omitting the residence. This objection is respectfully traversed. The Applicant's copy of the declaration says, "Resident of MARIETTA, PA."

[4] The informality of the drawing is noted.

[5] The Examiner objected to the drawing.

(a) The requirement for showing a toe in the drawing is respectfully traversed, as the toe is part of the user who is recited in the preamble, and not of the claimed subject matter. The Applicant does not claim any toes.

The rejection is moot as to “dorsiflexion” because that term is removed from the claims, except for allowable claim 8. In regard to claim 8, the requirement is respectfully traversed on the grounds that (1) arrows “A” in Figs. 1 and 2 illustrate dorsiflexion, (2) dorsiflexion is an action or movement, and as such needs no illustration when the claim is to a mechanical device, and (3) it is an action of the user and not of the claimed device.

(b) A return spring 370 is illustrated in Fig. 3.

[6] The disclosure was objected to for “KEVLAR.” Correction has been made as required.

[7-8] Claims 1 and 12 were rejected under 35 U.S.C. §102(b) as being anticipated by Carlsmith '231. This rejection is respectfully traversed.

Fig. 2 of Carlsmith shows braking by changing the angle of the foot relative to the ground. There is no disclosure of a toe lifter connected to a brake, as claimed.

Carlsmith's invention (its Fig. 2 is its prior art) employs rotation of the entire foot to actuate the brake: “The boot is attached to the frame via a hinge somewhat to the rear of the middle of the foot A rod ... is attached to the boot via an additional hinge” (col. 6, lines 45-53). In this structure, the rod actuates the brake when the entire boot is rotated: “Braking ... is accomplished when the skater pushes down with his or her heel on the boot 62” (col. 10, line7). Clearly, the brake is not actuated by an upward pressing of the toe.

[9] Claims 1-3 and 12 were rejected under 35 U.S.C. §102(b) as being anticipated by Integnan '511. This rejection is respectfully traversed.

Integnan states that the foot is made to “arch” (Abstract lines 3 and 9), with the toes pressed *downward* (Fig. 3A), opposite to the claimed toe motion.

Integnan shows force exerted by the “crown” of the foot, well back from the toes, between zones 34 and 35 in Fig. 3A (col. 5, lines 52-64). The crown acts on a saddle 42, as shown by the arrow in Fig. 3B, and this saddle 42 is too far back to be pressed upward by the toes; there is no disclosure of an element “pressable upward by the toe of the user to actuate the brake.”

Fig. 4 shows that the strap 46 is far above the toes (oval circles in Fig. 4). If, for the sake of argument (the reference does not disclose this) the saddle 42 could rotate forward about the pin 47, it could not reach the area above the toes because it would first hit the edge of the toe-covering portion of the boot 44. And if the toe-covering portion were removed (not disclosed or suggested) the angle of saddle would be too steep for the toes to press it; it would only rotate back the way it came instead of actuating the brake.

Moreover, even if toe actuation were *ad arguendo* possible, the reference teaches squarely against it. Integnan actively teaches against using the force of the toes to brake, asserting “the fact that the Toe itself simply and beyond any reasonable doubt has 'NO' enough power to effectively brake ... the Toe has simply no enough force even when amplified by a brake force amplifying means [for] effective braking” (col. 1, lines 32-41). The disclosure is thus directly contrary to the Applicant's claims.

No lifter pivoted to be moved upward by the toe (claim 3) is seen.

New claim 13 still further distinguishes over Integnan by reciting a location that is not only not disclosed but, as noted above, is impossible and unworkable and is taught against in this reference. New claim 16 also distinguishes over all of the applied references.

[10] Claims 1-3, 5, and 6 were rejected under 35 U.S.C. §102(b) as being anticipated by Bellehumeur '346. This rejection is respectfully traversed.

Bellehumeur discloses toe force to activate a brake, but it is a downwardly-directed toe force, directly opposite to the claimed subject matter. “[W]hen these toes are bent *downwardly*, toe plate 20 will move” (col. 2, line 47; emphasis added). The toe motion is also rearward, as shown by dimension “m” in Fig. 5. Bellehumeur continues: “This rearward movement by the skater's toe generates a great deal of power ... This power can be regulated ... [so that] the skater remains perfectly in control of his or her balance” (col. 2, lines 53-62). In the last passage Bellehumeur teaches opposite to the Applicant on the question of maintaining balance.

[11-12] Claims 9 and 11 were rejected under 35 U.S.C. §103 as being unpatentable over Bellehumeur '346. This rejection is respectfully traversed.

The Examiner asserts that the subject matter of these claims is "old and well-known" but cites no references. The Examiner is therefore taking Official Notice. The Applicant respectfully traverses and requests that an affidavit or an actual reference be produced in accordance with MPEP 2144.03 ("If the applicant traverses [Official Notice] the examiner should cite a reference"). Notice is taken against the entire subject matter of the rejected claim(s). “The facts so noticed serve to "fill the gaps [in the applied art]" and should not comprise the principal evidence upon which a rejection is based.” *In re Ahlert*, cited in MPEP 2144.03.

Since by definition Official Notice is to be taken only of facts which are so notorious as to be capable of "instant and unquestionable demonstration" (MPEP 2144.03, emphasis supplied), finding an actual reference cannot possibly be a burden on the PTO.

If the present rejection is to be maintained in any future Office Action, that Action should be non-final if any new issue arises. MPEP 2144.03.

Assuming (for argument's sake only) that the Applicant's subject matter were actually well-known, the rejection is still a combination under § 103 and the Examiner has provided no motivation, as required. *Why* would the person of ordinary skill have used urethane or fiber reinforcement? No reason is apparent from the reference or from the rejection. With respect, no *prima facie* case has been made out and the Applicant is under no duty to respond.

[13] Claim 8 is rewritten in independent form and should now be allowable.

Withdrawal of the rejections and objection and allowance of all claims is requested. Attached hereto is a marked-up version of the changes made by the current amendment.

Respectfully submitted,

A handwritten signature in black ink that reads "Nick Bromer". The signature is written in a cursive, slightly slanted style.

Nick Bromer, Applicant
Registration No. 33,478
(717) 426-1664, voice and fax
402 Stackstown Road
Marietta, PA 17547

VERSION WITH MARKINGS TO SHOW CHANGES

2. (Amended) [The skate brake according to claim 1,]

For a user having a toe and standing on a skate, a skate braking mechanism comprising:
a brake; and

a lifter [moved] connected to the brake and pressable upward by [the dorsiflexion] the toe
of the user to actuate the [skate] brake;

whereby the brake connected to the lifter is actuated according to a natural motion of the
user to maintain balance.

3. (Amended) The skate [brake] braking mechanism according to claim 2, wherein the lifter is pivoted to be moved upward by the toe.

4. (Amended) The skate [brake] braking mechanism according to claim 3, wherein the lifter is pivoted about a pivot axis adjacent to a joint between a metatarsal and a phalanx of the toe.

5. (Amended) The skate [brake] braking mechanism according to claim 2, wherein the brake comprises [comprising] a brake shoe coupled to the lifter, and wherein the brake shoe bears on at least [the] one wheel of the skate [brake] when actuated.

6. (Amended) The skate [brake] braking mechanism according to claim 5, wherein the brake shoe is directly coupled to the lifter.

7. (Amended) The skate [brake] braking mechanism according to claim 5, wherein the brake shoe is coupled to the lifter via a linkage.

8. (Amended) [The skate brake according to claim 5,]

For a user, having a toe, on a skate including at least one wheel: a skate brake actuated by
dorsiflexion;

comprising a lifter moved upward by the dorsiflexion to actuate the skate brake;

comprising a brake shoe coupled to the lifter, and wherein the brake shoe bears on at least the one wheel of the skate brake when actuated;

wherein the brake shoe is pivoted to rotate about an axle of another wheel, so as to bear against the one wheel.

9. (Amended) The skate [brake] braking mechanism according to claim 5, wherein the brake shoe comprises fiber-reinforced elastomer.

10. (Amended) The skate [brake] braking mechanism according to claim 9, wherein the brake shoe comprises a portion of fiber-reinforced elastomer belt.

11. (Amended) The skate [brake] braking mechanism according to claim 9, wherein the elastomer comprises urethane.

12. (Amended) The skate [brake] braking mechanism according to claim [1,] 2, comprising a return spring counteracting [the dorsiflexion] an upward pressing motion of the toe.

IN THE SPECIFICATION

The belt 350 is preferably of urethane (the same material as most skate wheels) because of its toughness and abrasion resistance. Urethane belts of the type illustrated in Fig. 3 are made as timing belts in a variety of sizes, with steel braid or aromatic polyamide such as KEVLAR fabric reinforcement; they are available from BRECOflex Co., LLC, of Eatontown, NJ. The belt 350 has indentations 352 that engage gear teeth when it is used as a timing belt.